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Product datasheet for MG222539

Ripk3 (NM_001164108) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ripk3 (NM_001164108) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ripk3
Synonyms:	2610528K09Rik; AW107945; Rip3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>MG222539 representing NM_001164108
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTTCTGTCAAGTTATGGCCTACTGGTGCGTCAGCGGTTCCTCTGGTGAGCCGTGAAGAACTGAAGA
AGCTGGAGTTTGTGGGCAAAGGAGGGTTCGGAGTCGTGTTCCGGGCACACCACAGAACATGGAACCATGA
TGTAGCAGTCAAGATCGTGAACTCGAAGAAGATATCCTGGGAGGTGAAGGCTATGGTTAATCTTCGTAAT
GAGAACGTTCTGCTCCTGCTGGGGGTCACTGAGGACCTCCAGTGGGACTTCGTGTCCGGGCAGGCTCTGG
TGACAAGATTCATGGAGAATGGCTCCCTCGCAGGGCTGCTGCAACCCGAGTGCCCTCGGCCCTGGCCACT
CCTCTGTCGCCTGCTGCAGGAAGTGGTGCTGGGGATGTGCTACCTACACAGCTTGAACCCTCCGCTCCTG
CACCGGGACCTCAAGCCCTCTAACATTCTGCTGGATCCAGAGCTCCACGCCAAGCTAGCAGATTTTGGCC
TGTCCACGTTTCAGGGAGGGTCCCAGTCAGGGTCAGGATCAGGATCAGGATCCAGGGACTCTGGGGGCAC
CCTAGCGTACTTGGACCCAGAGCTGTTATTTAATGTCAACCTGAAGGCTTCTAAAGCGAGTGATGTCTAC
AGCTTTGGGATCCTCGTGTGGGCAGTGCTGGCTGGCAGAGAAGCTGAGTTGGTAGACAAGACTTCACTAA
TCCGGGAAACAGTGTGTGACAGGCAGAGTCGTCCTCCACTGACAGAGCTGCCTCCAGGTAGCCCTGAGAC
TCCTGGCTTGGAAAAACTGAAGGAGTTAATGATTCATTGCTGGGGTTCCCAGTCCGAAAACAGGCCATCC
TTCCAGGACTGCGAACCAAAAACCAATGAAGTTTACAATCTGGTAAAGGACAAGGTAGATGCTGCTGTCT
CCGAGGTAAAGCATTATCTGTCTCAGCACAGAAGCAGCGGCAGAAACTTGTCTGCCAGAGAGCCAAGCCA
AAGAGGCACAGAAATGGATTGCCCGAGGGAAACCATGGTTTCTAAAATGCTGGACCGCCTGCATTTGGAG
GAACCCTCCGGACCAGTTCCTGGAAAATGTCCTGAGAGGCAAGCACAGGACACATCAGTTGGGCCTGCCA
CACCAGCAAGGACATCTTCTGACCCCGTGGCTGGCACTCCTCAGATTCCACATACTTTACCCTTCAGAGG
CACAACACCTGGGCCAGTCTTTACTGAGACTCCCGGTCCTCACCCCCAAAGGAATCAGGGAGATGGAAGA
CACGGCACTCCTTGGTATCCCTGGACCCCACCGAATCCAATGACAGGGCCACCGGCTCTCGTCTTCAACA
ACTGTTCTGAAGTGCAGATTGGGAACTACAACTCCTTGGTAGCACCACCAAGAACTACTGCCTCAAGTTC
GGCCAAGTATGACCAAGCACAGTTCGGCAGGGGTAGGGGCTGGCAGCCCTTCCACAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

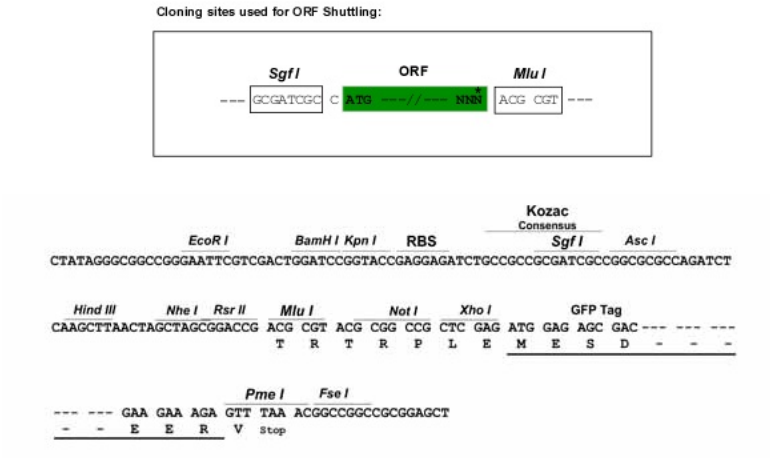
>MG222539 representing NM_001164108
Red=Cloning site Green=Tags(s)

MSSVKLWPTGASAVPLVSREELKKLEFVGKGGFGVVFRAHHRTWNHDVAVKIVNSKKISWEVKAMVNLRN
ENVLLLLGVTEDLQWDFVSGQALVTRFMENGSLAGLLQPECPRPWPLLCRLLQEVVLGMCYLHSLNPPLL
HRDLKPSNILLDPELHAKLADFGLSTFQGGSQSGSGSGSGSRDSGGTLAYLDPELLFNVNLKASKASDVY
SFGILVWAVLAGREAELVDKTSLIRETVCDRQSRPPLTELPPGSPETPGLEKLKELMIHCWGSQSENRPS
FQDCEPKTNEVYNLVKDKVDAAVSEVKHYLSQHRSSGRNLSAREPSQRGTEMDCPRETMVSKMLDRLHLE
EPSGPVPGKCPERQAQDTSVGPATPARTSSDPVAGTPQIPHTLPFRGTTPGPVFTETPGPHPQRNQGDGR
HGTPWYPWTPPNPMTGPPALVFNNCSEVQIGNYNSLVAPPRTTASSSAKYDQAQFGRGRGWQPFHK

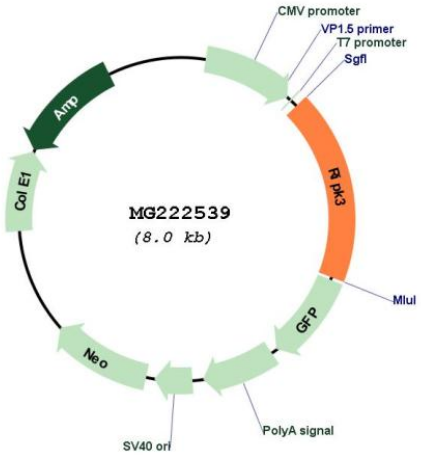
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001164108
ORF Size:	1266 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001164108.1, NP_001157580.1
RefSeq Size:	1980 bp
RefSeq ORF:	1269 bp
Locus ID:	56532
Cytogenetics:	14 C3
Gene Summary:	Essential for necroptosis, a programmed cell death process in response to death-inducing TNF-alpha family members. Upon induction of necrosis, RIPK3 interacts with, and phosphorylates RIPK1 and MLKL to form a necrosis-inducing complex. RIPK3 binds to and enhances the activity of three metabolic enzymes: GLUL, GLUD1, and PYGL. These metabolic enzymes may eventually stimulate the tricarboxylic acid cycle and oxidative phosphorylation, which could result in enhanced ROS production.[UniProtKB/Swiss-Prot Function]